What Is Claimed Is:

1.   A method for caching and accessing rights in a distributed computing system, the method comprising the steps of:

accessing, by an agent, a directory service, wherein the agent is located on a deputization point coupled to the directory service, and wherein the directory service comprises the rights of a principal to a resource;

updating, by the agent, the rights to an access control list cache, wherein the access control list cache is coupled to the deputization point and to the principal;

receiving, at the access control list cache, a request from the principal for the rights;

retrieving, by the access control list cache, the rights; and

forwarding, to the principal, the rights.

2.   The method of claim 1, wherein the access control list cache is comprised of a first table comprising the principal that has access to the resource.

3.   The method of claim 1, wherein the access control list cache is comprised of a second table comprising the rights of the principal to the resource.

4.   The method of claim 1, wherein the access control list cache is comprised of a third table comprising a cached access to the resource object.

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5.   The method of claim 2 further comprising the step of invoking, by the directory service, a resource manager, if the first table does not contain the principal that has access to the resource, wherein the resource manager is coupled to the directory service and comprises access information and rights of the principal to the resource.

6.   The method of claim 5 further comprising the step of mapping, by the resource manager, an access control of the rights in the resource manager to an access control of the rights in the directory service.

7.   The method of claim 6 further comprising the step of updating, by the resource manager, the mapped access control of the rights to the access control list cache.

8.   The method of claim 1, further comprising at least one of the following steps from the group consisting of:

remotely accessing, by the deputization point, the directory service;

remotely accessing, by the directory service, the deputization point;

remotely accessing, by the deputization point, the access control list cache;

remotely accessing, by the access control list cache, the deputization point;

remotely accessing, by the access control list cache, the principal; and

remotely accessing, by the principal, the access control list cache.

9.　　The method of claim 5, further comprising at least one of the following steps from the group consisting of:

remotely accessing, by the resource manager, the directory service; and

remotely accessing, by the directory service, the resource manager.

10.　　The method of claim 1, further comprising at least one of the following steps from the group consisting of:

asynchronously updating, by the agent to the access control list cache, the rights, when the rights are added to the directory service;

asynchronously updating, by the agent to the access control list cache, the rights, when the rights are removed from the directory service;

asynchronously updating, by the agent to the access control list cache, the rights, when the request from the principal is received;

synchronously updating, by the agent to the access control list cache, the rights, when the rights are added to the directory service;

synchronously updating, by the agent to the access control list cache, the rights, when the rights are removed from the directory service;

synchronously updating, by the agent to the access control list cache, the rights, when the request from the principal is received;

updating, at a scheduled time, the rights by the agent to the access control list cache; and

updating, after a time to live has expired, the rights by the agent to the access control list cache.

11.   A distributed computing system supporting access control caching, the system comprises:

> a plurality of computers, each having a memory and a processor;
>
> a plurality of communication links connecting the plurality of

5 computers;

> a principal located on a first one of the computers;
>
> an agent located on a second one of the computers;
>
> a resource located on a third one of the computers;
>
> a first set of rights located on a fourth one of the computers;

10 > a second set of rights located on a fifth one of the computers;

> means for accessing, by the agent, the first set of rights of the

principal to the resource;

> means for updating, by the agent, the first set of rights to an

access control list cache, wherein the access control list cache is located on a

15 sixth one of the computers;

> means for receiving, at the access control list cache, a request

from the principal for the first set of rights;

> means for retrieving, by the access control list cache, the first set

of rights; and

20 > means for forwarding, to the principal, the first set of rights.

12.   The system of claim 11 further comprises means for invoking the second set of rights, if the first set of rights is not located on the fourth one of the computers.

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13.   The system of claim 12 further comprises means for mapping an access control of the of the second set of rights to an access control of the first

set of rights.

14.   The system of claim 13 further comprises, means for updating the access control list cache with the mapped access control of the first set of

5   rights.

15.   A computer storage medium having a configuration that represents data and instructions which will cause performance of method steps for caching and accessing rights in a distributed computing system, the method

10   comprising the steps of:

accessing, by an agent, a directory service, wherein the agent is located on a deputization point coupled to the directory service having the rights of at least one principal to at least one resource;

updating, by the agent, the rights to an access control list cache,

15   wherein the access control list cache is coupled to the deputization point, and wherein the access control list cache is coupled to the principal;

receiving, at the access control list cache, a request from the principal for the rights;

retrieving, by the access control list cache, the rights; and

20   forwarding, to the principal, the rights.

16.   The configured storage medium of claim 15 further comprising the step of invoking, by the directory service, a resource manager, if the access control list cache does not contain one of the rights, wherein the resource

25   manager is coupled to the directory service, and wherein the resource manager comprises the one right.

17.   The configured storage medium of claim 16 further comprising the step of mapping, by the resource manager, an access control of the one right to an access control of the rights.

5   18.   The configured storage medium of claim 17 further comprising the step of updating, by the resource manager, the mapped access control of the rights to the access control list cache.

19.   A computer supporting access control caching, the computer
10   comprises:

a memory and a processor;

a principal;

an agent;

a resource;

15   an access control list cache;

a first set of rights;

a second set of rights, wherein the memory, the processor, the principal, the agent, the resource, and the access control list cache exchange information relating to the first set of rights and the second set of rights;

20   means for accessing the first set of rights of the principal to the resource;

means for updating the first set of rights to the access control list cache;

means for receiving a request from the principal for the first set
25   of rights;

means for retrieving the first set of rights; and

means for forwarding the first set of rights to the principal.

20. The system of claim 19 further comprises means for invoking the second set of rights, if the first set of rights are not available.

21. The system of claim 20 further comprises means for mapping an

5   access control of the of the second set of rights to an access control of the first set of rights.

22. The system of claim 21 further comprises, means for updating the access control list cache with the mapped access control of the first set of

10   rights.